DOCUMENT RESUME

ED 217 953 JC 820 332

AUTHOR Redmond, Mark V.
TITLE A Process of Midterm Evaluation Incorporating Small Group Discussion of a Course and Its Effect on Student Motivation.
PUB DATE [82]
NOTE 18p.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Course Evaluation; *Evaluation Methods; *Formative Evaluation; Instructional Improvement; Postsecondary Education; *Student Evaluation of Teacher Performance; *Student Motivation
IDENTIFIERS *Small Group Instructional Diagnosis

ABSTRACT

The use of the Small Group Instructional Diagnosis (SGID) method in mid-term evaluations of teacher performance is described and assessed in terms of its effectiveness in improving student motivation. First, the steps involved in the SGID process are described: (1) the initial conference between the instructor and SGID facilitator; (2) the classroom intervention in which the facilitator breaks the class into groups of five or six students and asks them what they like about the course, what they think needs improvement, and how these improvements might be achieved; (3) the feedback session between the facilitator and the instructor; (4) instructor review of SGID results with the class; and (5) a follow-up session between the facilitator and the instructor. Next, a study is described, which was designed to assess changes in the motivation of 107 SGID participants and 92 non-SGID participants. The study revealed a significant improvement in the motivation of SGID students on 11 of 18 items on a motivation scale, and a decline in motivation for the control group on 11 items. A final discussion of study findings concludes that student motivation is positively affected by using SGID at midterm and that the process is an effective alternative to the standard end-of-term questionnaire evaluations of courses and instructors. (HB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED217953

A PROCESS OF MIDTERM EVALUATION INCORPORATING SMALL GROUP DISCUSSION OF A COURSE AND ITS EFFECT ON STUDENT MOTIVATION

Mark V. Redmond
University of Washington

This project was supported in part by a grant from the Fund for the Improvement of Post Secondary Education, Department of Education, acquired by D. Joseph Clark.

JC 820 332

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Mark V. Redmond

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"A Process of Midterm Evaluation Incorporating Small Group Discussion of a Course: and its Effect on Student Motivation." *

Mark V. Redmond
University of Washington

Introduction

Course and instructor evaluations by students are conducted for one or more reported reasons: to provide information to administrators about the performance of an instructor; to provide students with some guide to course offerings and instructors; and finally to provide the instructor with feedback. The purpose of providing feedback to an instructor is generally to aid in improving the course and the teaching, resulting in improved learning and consequently with improved education (Schultz, 1978; Cohen and Brawer, 1969). The above paradigm however, is not supported by research (Greenwood and Ramagli, 1980; Schultz, 1978). The failure of the above paradigm to be validated can be attributed to either flaws in the research design, flaws in the logic, or flaws in the evaluation/feedback process.

The study presented here, attempted to deal with the flaws in research design and evaluation technique. A procedure has been developed over the last four years that avoids several issues which have previously undermined course evaluation.

Description of Small Group Instructional Diagnosis (SGID)

Step One: Small Group Instructional Diagnosis has five basic steps. The first step is an intial conference between the instructor and the facilitator. In this step, the facilitator should: 1)establish a trusting relationship that will serve as a base for further interaction; 2) familiarize the facilitator with the course and the instructor's style; 3) familiarize the instructor with the technique; 4) identify particular areas which are of concern to the instructor; and 5) arrange the place, time and date near or before midterm for the classroom intervention. The timing of SGID was of particular interest under the grant. Obviously, the students can only judge the impact of their suggestions if there is sufficient time to implement their suggestions. Ample time must be given, however, for the students to have made some observations about the course and

* This project was supported in part by a grant from the Fund for the Improvement of Post Secondary Education, Department of Education, acquired by D. Joseph Clark.

the instructor.

Step Two: The second step, the actual classroom intervention, involves the following sequence of events. First, it is best that the instructor introduce the facilitator, indicating the instructor's desire to receive honest student feedback, as well as indicating confidence in the facilitator. This helps to give the facilitator immediate credibility. Most schools use a fifty-minute class period. The technique has undergone much streamlining to find the proper balance between minimized time consumption and maximum output and effect. Generally, the technique can be conducted in twenty-five minutes, thus leaving the instructor at least half the period for teaching. The technique has been used during both the first and second halves of the period. Conducting the technique during the first half allows for more flexibility of time; thus if necessary 30 or 40 minutes would be available. This does necessitate having the instructor return twenty-five minutes later or maybe waiting in the hall. It also tends to sensitize the students to instructor weaknesses which they will over attend upon the instructor's return, without the instructor realizing why there is snickering. Conducting the technique during the latter half of a period has proven more successful. The facilitator can observe the instructor teaching for 25 minutes and gain a better perspective on the course and the forthcoming student comments. The students have some immediate teaching on which to react. The major problem of latter-half application is running out of time if more than 25 minutes are needed, or if the instructor failed to turn the class over to the facilitator at the end of 25 minutes. To safeguard against these problems, instructors were asked to turn the class over to the facilitator after 20 minutes.

After introducing the facilitator, the instructor leaves and the facilitator explains the reason for his or her presence. We were frequently asked by students what was going to happen to the information generated. Students were often suspicious of the facilitator -- fearing the facilitator was a henchman for administration. The facilitator should emphasize that the information generated is

confidential and will be given only to the instructor. Emphasizing that the students had an opportunity to directly affect the remainder of their course proved to enhance student involvement in the process.

The facilitator then briefly describes the steps the students are to follow. The students will be asked to form groups of four, five, or six, preferably with students they don't know. Previous research show that groups of around five provide an optimal balance between output and member satisfaction. Having students grouped with non-acquaintances reduces socialization time and enhances the task orientation of the group. The groups are to choose a spokesperson to keep notes on what the group generates. Selecting the spokesperson reduces time that might be spent on task structuring and orientating that occurs in leaderless groups. In the majority of our observations, the spokespersons are effective at getting the group members involved, in determining consensus, and moving along the discussion.

The facilitator explains that they are to address three questions. For each question, they should generate a list of responses about which they generally all agree. The three questions are:

1) What do you like about the course?
2) What do you think needs improvement?
3) What suggestions do you have for bringing about those improvements?

They are told that they will have seven or eight minutes to discuss, though generally ten minutes is allowed. Ten minutes puts pressure on the group to deal with the task, yet allows enough time for each member to contribute. When large amounts of time were used, more individualistic issues were raised accompanied by greater dissension.

The facilitator lets the students know that after the discussions, the class will reconvene and each group will report. These reports will be written on the board or overhead, and recorded. It is explained that what is written on the board will be taken as representing the overall class and taken back to

the instructor.

The students are then asked to form groups and begin. After five or six minutes, the facilitator should prod the groups on by indicating how much time remains. After the allotted time, the class is reconvened and the facilitator may select one or two students to keep notes on what is about to be written on the board. Group reports are then taken. Initially, we would have each spokesperson report all their responses to a particular question, but this often left little for other groups to add since the responses are often homogenous. To avoid leaving groups out, and the feeling that their efforts were for naught, each spokesperson is asked to give only one response. As many groups as possible are tapped; in small classes it is possible to have the groups report two or three times per question. After the likes are enumerated and written on the board, the improvements and suggestions are taken.

Though the small group discussions help to filter out minority views, those views are still sometimes reported. The facilitator must be sensitive to dissension and minority reporting. When it is obvious that a view is not shared by most, asking for a show of hands of supporters and non-supporters provides rough percentages of the class stand. These percentages are also indicated on the board. Nominal group technique suggests saving discussion of issues until after all the reports have been taken. When dissension first occurs, we suggest assuring the students that they will later have an opportunity to discuss the controversial issues. This delay detaches negative criticism towards the group that presents an unpopular opinion.

The facilitator may wish to summarize the comments on the board to assure accurate understanding.

We have found several problems that can occur in this classroom session. The facilitator may try to impose his/her own views on what the students are saying, reducing the accuracy and student trust. Sometimes, facilitators evaluate student comments, usually increasing student distrust and skepticism

about the process. Sometimes, student discussion can become very vocal and the facilitator needs to be skilled in handling conflict situations. Another problem identified has been the lack of sensitivity of some facilitators. Minority views are falsely reported to the instructor as representative of the entire class.

Step Three: The next step in SGID is the feedback session between the facilitator and the instructor. This step has been identified as the most difficult part of the process. We have identified several interpersonal skills that a facilitator needs, specifically: supportive, warm, sensitive, understanding, non-judgmental, and an active listener. Besides these skills, the facilitator should have adequate teaching experience and knowledge.

At one demonstration, an observer questioned the efficacy of facilitators providing interpretation of student motivations. This point led to a taxonomy of facilitator roles. The first level a facilitator operates from is that of a communication channel with primary concern for conveying student sentiments in such a way as to avoid defensive reactions from the instructor that may block the flow of information.

The second level is that of information source. The facilitator may wish to share his or her own teaching experiences and/or inform the instructor of available resources or techniques.

At the third level, which should only be incorporated by more experienced facilitators, possible interpretations of student reasoning and concerns are given. The facilitator may offer hypothesized explanations of the instructor's teaching strategies for instructor reaction and reflection. In this session, the facilitator and instructor discuss the instructor's reaction to the student comments and plan a strategy of change. They should also discuss what the instructor should say to the students.

Step Four: In the next step, the instructor reviews with the class. The instructor should use the first ten minutes in the ensuing class period to get clarification from students about comments that were unclear, summarize the student comments to correct distortions and check for accuracy, and finally the instructor should provide some reaction to the comments which might include outlining any intended changes or adaptations.

Step Five: The final step involves a follow-up session between the facilitator and the instructor. Because many of our demonstrations occurred off campus, this step was often not performed, and consequently it is not as well developed as the others. This session should be used to review with the instructor the success of the review session with the students. The session should emphasize a self-evaluation by the instructor of how the changes are working, as well as an analysis of impact upon the students. This session should serve to reinforce the instructor's changes and improvements.

The gathering of student feedback during the progress of a course is not revolutionary. Many instructors incorporate various types of ongoing information gathering techniques (for example, Ballantine, 1978; Pastrana, 1979) because of the benefits produced. SGID has taken the acknowledged value of midterm feedback and added the impact of small group dynamics for the purpose of improving instruction.

Several factors of the SGID technique are believed to have a substantial impact on the educational process. Since the procedure occurs at midterm or before, and the feedback to the instructor occurs almost immediately thereafter, students have a genuine opportunity to evaluate: (1) the impact of their feedback, and (2) the receptivity and responsiveness of the instructor. The small group discussion in lieu of paper and pencil questionnaires provides the students an opportunity for: (1) comparing views, (2) realigning minority views, (3) having a significant audience, and (4) participating in a pleasant social experience (particularly in contrast to large lecture routine.)

Finally, the nature of the questions and information collected by the facilitator allows the students to impose their own priorities and values, and more importantly involves them in providing constructive suggestions on how to handle the problems (Schein and Bennis, 1965). Being confronted with how to solve problems can lead to greater understanding of the instructor's position. Small group research (for example, Tubbs, 1978; Shaw, 1976) generally supports the contention that using small group discussion for organizational decision-making will result in more active acceptance of changes. SGID involves the students in the selection and direction of teaching strategies. The above dynamics of the SGID process are in sharp contrast to the typical end-of-the-term questionnaires.

In a survey of SGID instructor participants, a significant positive change was reported in student attitude towards instructor, student attitute towards course, over all morale, and student motivation. When instructors compared SGID to other student rating methods, they reported significantly greater change in their attitude towards the students, increased rapport and interaction with the class, and increased motivation for trying new techniques. Instructors also reported the elimination of specific teaching problems as a valuable result of SGID. Although unable to identify the specific aspects of the technique responsible for the reported changes, it is highly likely that SGID's use of a consulting session between the instructor and facilitator and discussion between the instructor and students is responsible for those changes.

Problems in Validating Evaluation Techniques

Peter Seldin (1980, p. 166) concludes his book, Successful Faculty Evaluation Programs, "We know that faculty evaluation is only a means to an end -- the improvement of teaching in order to improve student learning." Regretfully, empirical validation of a relationship between student learning (as assessed by some standardized end-of-term achievement tests) and teaching effectiveness has been weak and frought with problems (see reviews by Cohen and Brawer, 1969; Centra, 1977; Schultz, 1978; Greenwood and Ramagli, 1980).

A few studies (see review by Schultz, 1978; Centra, 1973) have attempted to assess improvement in instruction resulting from student ratings. The results are inconsistent and filled with qualifiers. Most of the studies operationalize changes in instruction as the difference between an initial student rating and a subsequent student rating, thus compounding the errors inherent in student ratings. One finding (Aleamoni, 1977) relevant to the strategy chosen for SGID found that teachers improved with feedback when the feedback was in a conference session with an evaluation expert.

Studies have examined the correlation between student learning and teaching effectiveness, but have depended on assessment of student learning through the use of standardized end-of-term comprehensive examinations and teaching effectiveness assessed through the use of student ratings (see reviews by Centra, 1977; Cohen and Brawer, 1969; Schultz, 1978; Greenwood and Ramagli, 1980; Braskamp, Caulley and Costin, 1979; McKeachie, Y-Guang Lin, and Mann, 1971.)

We know of no studies that have attempted to assess improvement in student learning or motivation resulting from changes made by an instructor after receiving student feedback/evaluation.

Research Design

The three constructs under consideration are: (1) student learning/motivation, (2) student feedback/evaluation, and (3) instructor/course improvement.

To avoid the problems inherent in defining and assessing student learning, this study examines the more distinguishable but highly interrelated construct of student motivation.

We hypothesize that student participation in generating midterm feedback through the use of Small Group Instructional Diagnosis will improve their motivation. Keep in mind that SGID involves discussion between a facilitator and the instructor, and between the instructor and the students. An instructor who uses SGID should expect to see improvement in the motivation levels of the students as compared to an instructor who does not use the technique.

Instrument: After a review of the literature and interviews with several experienced instructors, a self-report instrument was constructed which included behavioral, attitudinal and perceptual components that seem reflective of student motivation (see attached questionnaire). In addition to eighteen items dealing with student motivation, three questions were included which assessed the similarity between classes and between students from pre-test/post-test administrations. These questions were designed to help establish the reliability of the findings and are discussed in more detail later.

Instrument Reliability: Two sets of data were used in analyzing reliability through split half correlations (corr = .64, Spearman-Brown corr = .78; corr = .69, Spearman-Brown corr = .82). A factor analysis of the items generated only two factors fitting the Root-one criterion (Eigenvalues: factor 1 = 5.32; factor 2 = 1.13). Factor one accounted for 65% of the variance, factor two for only 13.8%. All but two of the items (item 1, amount of reading, and item 2, late for class) correlated above the .30 level on factor one. Factor two had only two items above a positive .30 level (item 3, attentiveness; and item 4, class period interesting) and two negatively correlated above the .30 level (item 12, plan on another course from instructor; and item 14, taking another course in area). All items were retained in the assessment of impact of Small Group Instructional Diagnosis, though a separate subscale of student motivation based on factor one consisting of all but items 1 and 11 was also computed.

Procedure: The student motivation questionnaire was administered to two large introductory science classes (Biology , 120 students; and Atmospheric Science , 150 students) in the fifth week of a ten-week course. Small Group Instructional Diagnosis was then conducted in the Atmospheric Science class. (The follow up session between the instructor and the facilitator was not conducted until after the end of the term). The information generated by the students about the course was discussed with the instructor, who, in turn, spent time discussing the issues with the students. No attempt was made to statistically

determine if the instructor actually modified the course in response to the student input (though in the follow-up session after the term, the instructor did indicate specific changes that were made in response to student suggestions). At the end of the term, the student motivation questionnaire was again administered to both classes.

Results: According to the proposed model of student motivation, the students who participated in the Small Group Instructional Diagnosis should have reported higher motivational levels than those reported at midterm; those who were in the control group should have either remained at the same motivational level as they reported at midterm, or should have actually declined.

Hypothesis Test: T-tests were performed for each class on the pre and post-test scores; the significance levels are presented in Table 1. Eleven of the eighteen items showed improvement ($p < .05$) in motivation for the SGID participants. None of the items improved significantly for the control group. None of the post-test means of the SGID group went in the negative direction other than those predicted, whereas eleven of the post-test means of the control group represented declines from the midterm scores (though only two were statistically significant at $p < .05$). A Wilcoxan matched pairs signed rank test between the SGID group and the control group produced a significant difference in the direction predicted ($p < .005$).

A scale composed of all eighteen items produced a significance level less than .005 on the T-test for the Small Group Instructional Diagnosis subjects, and an insignificant change ($p = .292$) in the control group (the post-test scale mean actually represents a decline from the pre-test). On the student motivation scale (factor one - all items excluding 1 and 11) the T-value for the SGID group was -2.93 with a one-tailed probability of $p = .002$ (172 df), for the non-SGID group the T-value was 1.07 (again representing a decline in post-test mean) with a one-tailed probability of $p = .143$ (179 df).

Reliability of Findings: Since two different classes with two different instructors were used, an attempt was made to ascertain whether substantive differences existed between the students of the two classes that might have influenced the results. Three additional items were added to the questionnaire for that purpose.

The first item dealt with what has been called "pre-course motivation" in other research (Howard & Maxwell, 1980). The item asks "how much desire did you have to take this course?" Because the pre-test was given five weeks into the quarter, some differences in the amount of motivation attributable to the course and instructor would be expected. The premotivation item should not have been affected by the exposure to the course if the students are reporting objectively. The responses to how much desire students had to take the course should produce similar data from both classes if they are to be assumed to be similar at the beginning of the term (T-test value .07, df = 190, $p < .943$, insignificant). The statistical comparison between the two classes substantiates the presumed similarity in premotivation levels, and between the two sets of subjects.

The second item sought to compare the reasons students were taking the course. Both courses were introductory level science courses (Atmospheric Science and Biology) which are used primarily to satisfy the University's distribution requirements. The item provided a list of reasons for the student to select from in response to "which applies to the reason you're taking this course?" The choi es were progressively exclusive, that is a person would only find one category that was appropriate.

Table 2 shows the relative distributions of the item responses in percentages for both classes five weeks into the course (pre-test) and at the end of the term (post-test).

TABLE 2

"What applies to the reason you're taking this course?"

	Pre-test SGID (%)	Pre-test Control (%)	Post-test SGID (%)	Post-test Control (%)
1. in my major	7	7	5	7
2. in my minor or program requirement	8	12	8	15
3. a distribution requirement	60	62	64	64
4. an elective	21	12	20	10
5. other	4	7	3	4

The distributions were not found to be significantly different between the two classes to bother the pre-test and post-tests (though not a true interval scale, T-test probabilities were:pre-test $p = .55$, post-test $p = .22$). Again supporting the presumed similarity between the experimental and control groups.

A concern for subject mortality has led to an examination of those items which should not have change significantly from pre to post-test if absenteeism and course drop-out was random in both classes and not attributable to mortality of a specific segment of the population. Highly motivated students might be more likely to stay in a course until the end of term than low motivated students. Mortality which may have been due to the less motivated student dropping out should have happened in both courses and, therefore, should not affect the differences being attributed to the SGID treatment. No significant change occurred between the pre-test and the post-test scores for the item dealing with pre-motivation (desire to take course) in either class (SGID group - two-tailed T-value = 1.07, 170 df, $p = .284$; control group - $T = .47$, 179 df, $p = .637$), or on the item dealing with the reason for taking the course (SGID group - two-tailed T-value = .06, 164 df, $p = .953$, control group - $T = .70$, 177 df, $p = .486$).

A two-tailed T-test on the item dealing with student's expected grade did produce a decline in both classes though not quite significant in the SGID class ($T = 1.64$, 176 df, $p = .10$) but significant in the control class ($T = 2.40$, 162 df, $p = .02$). A decline could be due to a clearer understanding at the end of the term of how the student was doing, for students have more information at the end of the term on which to make predictions about their grade. The decline in both groups also indicates that the better students were not the group which predominantly stayed in the SGID class until the end of the quarter. In both the pre-test and post-test, the control group had significantly higher grade expectancies than the SGID group ($T = 3.63$, 192 df, $p < .000$); $T = 2.09$, 154 df, $p = .038$)

Discussion

The results support the hypothesized impact of Small Group Instructional Diagnosis upon student motivational levels. Student motivation levels improved significantly when given the opportunity to generate midterm feedback, to hear the instructor's reactions, and to observe the instructor's attempts to implement changes. The actual interaction of variables needs further investigation. An earlier study (Clark and Redmond, 1981) provided some evidence that the improvement of motivation was due to an interaction effect between student participation and the instructor's response. In that study, half the lab sections of a large course participated in generating feedback through SGID. Though the changes implemented as a result of student input on the lecture session affected all the students, only those who participated in identifying the changes to be made through SGID had significant increases in motivation.

Research is continuing on the motivation scale and on SGID. Further validation and improvement of the motivation scale is needed. Additional items will be added to the scale in an attempt to incorporate other behavioral indices of motivation. Many of the dynamics of SGID need to be examined in greater detail

in order to understand which variables are actually affecting student motivation.

The strategy used in assessing the effectiveness of SGID as an evaluation tool is based on the fundamental reason for conducting evaluations of courses and instructors that often overlooked. If evaluation is supposed to generate information from which an instructor can make improvements, then those changes should be made for the purpose of improving student learning. In this study, student learning was not directly assessed, but rather the strategy was to examine the underlying motivational level of students. Though no single definition of effective teaching has found total acceptance, most will agree that the ability to increase student motivation is characteristic of the best teachers.

Small Group Instructional Diagnosis has proven to be an effective alternative to the standard end-of-term student questionnaire evaluations of course and instructor. Mid-term assessment through the use of a facilitator and small group discussions among the students provides a constructive interchange among the instructor, students and facilitator. Besides the advantages inherent in the mid-term timing, in the use of small group discussion and in the use of a facilitator, our research provides evidence that student motivation is also positively impacted through the use of SGID.

TABLE I

		T-Test one-tailed probabilities	
		SGID PARTICIPANTS (N = 107 Pre) (N = 77 Post)	NON-SGID PARTICIPANTS (N = 92 Pre) (N = 92 Post)
1.	How much of the assigned reading have you done?	.048*	.323
2.	How much of the assigned reading have you enjoyed?	.009*	.158**
3.	How much of each class period would you say you are attentive?	.217	.019**
4.	How much of each class period do you find interesting?	.024*	.038**
5.	How much of each lecture do you feel you understand at the end of each class period?	.253	.156**
6.	How much supplementary reading have you sought out and read?	.076	.108
7.	How often do you bring up class material in your day-to-day conversations?	.012*	.146
8.	How often do you ask questions in class?	.044*	.210
9.	How often do the comments of the lecturer spark ideas of your own or the subject matter?	.000*	.207
10.	How often are you "watching the clock" towards the end of the period?	.080	.341
11.	How often are you late for class?	.108	.245
12.	Do you plan on taking another class from these instructors?	.030*	.178**
13.	Would you like to take another class from these instructors?	.000*	.133**
14.	Do you plan on taking another class in this subject area?	.202	.161**
15.	Would you like to take another class in this subject area?	.174	.169**
16.	How important do you feel this course is?	.014*	.333**
17.	Do you think the instructors enjoy teaching this course?	.001*	.176**
18.	Do you think the instructors understand students?	.037*	.129**
	Scale composed of all 18 items	.005*	.196**
	Scale composed of all items minus item 1 and item 11	.002*	.143**

* significant at the $p < .05$ level

** indicates T-value is opposite predicted direction

REFERENCES

Aleamoni, Lawrence M. and Hexner, Pamela Z. "A Review of the Research on Student Evaluation and a report on Different Sets of Instructions on Student Course and Instructor Evaluation." Instructional Science, 1980, 9, 67-84.

Ballantine, Jeanne H. "Course Improvement by Systematically Eleciting Student Reactions." Teaching Sociology, January 1978, Vol. 5, #2, 167-169.

Braskamp, Larry A; Caulley, Darrel and Costin, Frank. "Student Ratings and Instructor Self Ratings and their Relationships to Student Achievement." American Educational Research Journal, Summer 1979, Vol. 16, #3, 295-306.

Centra, John A. "Effectiveness of Student Feedback in Modifying College Instruction." Journal of Educational Psychology, 1973, Vol. 65, #3, 395-401.

Centra, John A. "Student Ratings of Instruction and their Relationship to Student Learning." American Educational Research Journal, Winter 1977, Vol. 14, #1, 17-24.

Clark, D. Joseph and Redmond, Mark V. "Small Group Instructional Diagnosis: A Method for Instructional Improvement and Course Evaluation," a paper presented at the Seventh International Conference on Improving University Teaching, Tsukuba, Japan, 1981.

Cohen, Arthur M. and Brawer, Florence B. Measuring Faculty Performance, Washington, D.C., ERIC Clearinghouse for Junior College Information/American Associates of Junior Colleges, 1969.

Greenwood, Gordon E. and Ramagli, Jr., Howard J. "Alternatives to Student Ratings of College Teaching." The Journal of Higher Education, November/December 1980, Vol. 51, #6, 673-684.

Howard, George S. and Maxwell, Scott E. "Correlation between Student Satisfaction and Grades: A case of Mistaken Causation?" Journal of Educational Psychology, 1980, Vol. 72, #6, 810-820.

McKeachie, W.J., Lin, Yi-Guang and Mann, William. "Student Ratings of Teacher Effectiveness: Validity Studies." American Educational Research Journal, May 1971, Vol. 8, #3, 435-445.

Pastrana, David E. "How to Enhance your Student Evaluation in Ten Minutes." Faculty Development and Evaluation in Higher Education, Summer 1979, Vol. 5, #2, 13-14.

Schein, E.H. and Bennis, W.G. Personal and Organizational Change through Group Methods. New York, Wiley, 1965.

Seldin, Peter. Successful Faculty Evaluation Programs. Crugers, New York: Coventry Press, 1980.

Shaw, Marvin E. Group Dynamics: The Psychology of Small Group Behavior. 2nd ed. New York, McGraw-Hill, 1976.

Tubbs, Stewart L. A Systems Approach to Small Group Interaction. Reading, Mass. Addison-Wesley, 1978.

AUG 13 1982
UNIVERSITY OF CALIFORNIA
ERIC® CLEARINGHOUSE FOR
JUNIOR COLLEGES
96 POWELL LIBRARY BUILDING
LOS ANGELES, CALIFORNIA 90024
EE 36